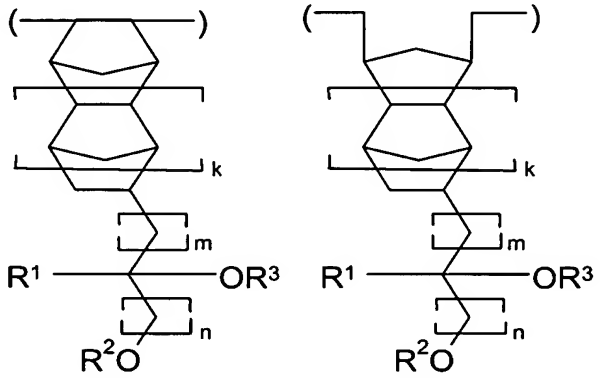
This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

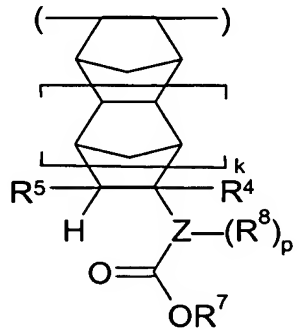
1. **(Currently Amended)** A polymer comprising recurring units of the following general formula (1-1) or (1-2) ~~derived from the ether compound of the above formula (1)~~ and having a weight average molecular weight of 1,000 ~~to~~ - 500,000,



(1-1) (1-2)

~~wherein k, m, n, and R1 to R3 are as defined above~~ wherein R^1 is hydrogen or a straight, branched or cyclic alkyl group of 1-6 carbon atoms, R^2 is a straight, branched or cyclic alkyl group of 1-6 carbon atoms, R^3 is hydrogen or an acyl or alkoxycarbonyl group of 1-15 carbon atoms in which some or all of the hydrogen atoms on the constituent carbon atoms may be substituted with halogen atoms, k is 0 or 1, m is an integer from 0-3, and n is an integer from 3-6.

2. **(Currently Amended)** The polymer of claim 1 comprising, in addition to the recurring units of formula (1-1), recurring units of the following general formula (2-1):



(2-1)

wherein k is 0 or 1 ~~as defined above~~,

R^4 is hydrogen, methyl or $CH_2CO_2R^6$,

R^5 is hydrogen, methyl or CO_2R^6,

R^6 is a straight, branched or cyclic alkyl group of ~~1 to 15~~ 1-15 carbon atoms,

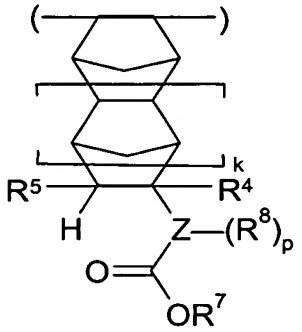
R^7 is an acid labile group,

R^8 is ~~selected from the class consisting of~~ a halogen atom, a hydroxyl group, a straight, branched or cyclic alkoxy, acyloxy or alkylsulfonyloxy group of ~~1 to 15~~ 1-15 carbon atoms, ~~and~~ or a straight, branched or cyclic alkoxycarbonyloxy or alkoxyalkoxy group of ~~2 to 15~~ 2-15 carbon atoms, in which some or all of the hydrogen atoms on constituent carbon atoms may be substituted with halogen atoms,

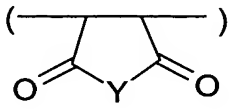
Z is a single bond or a straight, branched or cyclic (p+2)-valent hydrocarbon group of ~~1 to 5~~ 1-5 carbon atoms, in which at least one methylene may be substituted with oxygen to form a chain-like or cyclic ether or two hydrogen atoms on a common carbon may be substituted with oxygen to form a ketone, and

p is 0, 1 or 2.

3. (Currently Amended) The polymer of claim 1 comprising, in addition to the recurring units of formula (1-1), recurring units of the following general formulae (2-1) and (3):



(2-1)



(3)

wherein ~~Z, k, p and R^4 to R^8 are as defined above~~ k is 0 or 1,

R^4 is hydrogen, methyl or $CH_2CO_2R^6$,

R^5 is hydrogen, methyl or CO_2R^6,

R^6 is a straight, branched or cyclic alkyl group of 1-15 carbon atoms,

R^7 is an acid labile group,

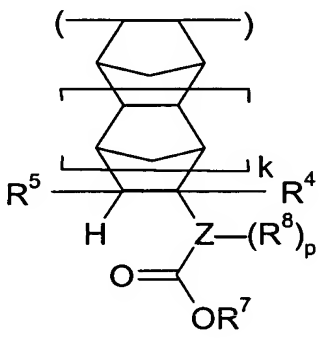
R^8 is a halogen atom, a hydroxyl group, a straight, branched or cyclic alkoxy, acyloxy or alkylsulfonyloxy group of 1-15 carbon atoms, or a straight, branched or cyclic alkoxycarbonyloxy or alkoxyalkoxy group of 2-15 carbon atoms, in which some or all of the hydrogen atoms on constituent carbon atoms may be substituted with halogen atoms,

Z is a single bond or a straight, branched or cyclic (p+2)-valent hydrocarbon group of 1-5 carbon atoms, in which at least one methylene may be substituted with oxygen to form a chain-like or cyclic ether or two hydrogen atoms on a common carbon may be substituted with oxygen to form a ketone,

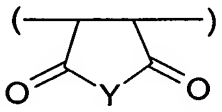
p is 0, 1 or 2, and

Y is an oxygen atom or NR^9 wherein R^9 is a straight, branched or cyclic alkyl group of ~~1 to 6~~ 1-6 carbon atoms.

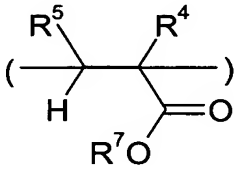
4. (Currently Amended) The polymer of claim 1 comprising, ~~in addition to the~~ recurring units of formula (1-1), recurring units of ~~the following general~~ formula (4), ~~alone or in combination with recurring units of the following general formula (2-1), and~~ recurring units of ~~the following general~~ formula (3), and optionally, recurring units of the formula 2-1:



(2-1)



(3)



(4)

wherein ~~Y, Z, k, p, and R^4 to R^9 are as defined above~~ k is 0 or 1,

R^4 is hydrogen, methyl or $CH_2CO_2R^6$,

R^5 is hydrogen, methyl or CO_2R^6,

R^6 is a straight, branched or cyclic alkyl group of 1-15 carbon atoms,

R^7 is an acid labile group,

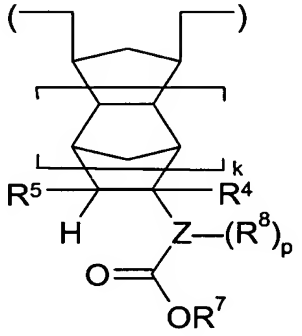
R^8 is a halogen atom, a hydroxyl group, a straight, branched or cyclic alkoxy, acyloxy or alkylsulfonyloxy group of 1-15 carbon atoms, or a straight, branched or cyclic alkoxycarbonyloxy or alkoxyalkoxy group of 2-15 carbon atoms, in which some or all of the hydrogen atoms on constituent carbon atoms may be substituted with halogen atoms,

Z is a single bond or a straight, branched or cyclic (p+2)-valent hydrocarbon group of 1-5 carbon atoms, in which at least one methylene may be substituted with oxygen to form a chain-like or cyclic ether or two hydrogen atoms on a common carbon may be substituted with oxygen to form a ketone,

p is 0, 1 or 2, and

Y is an oxygen atom or NR^9 wherein R^9 is a straight, branched or cyclic alkyl group of 1-6 carbon atoms.

5. (Currently Amended) The polymer of claim 1 comprising, in addition to the recurring units of formula (1-2), recurring units of the following general formula (2-2):



(2-2)

wherein ~~Z, k, p and R^4 to R^8 are as defined above~~ k is 0 or 1,

R^4 is hydrogen, methyl or $CH_2CO_2R^6$,

R^5 is hydrogen, methyl or CO_2R^6,

R^6 is a straight, branched or cyclic alkyl group of 1-15 carbon atoms,

R^7 is an acid labile group,

R^8 is a halogen atom, a hydroxyl group, a straight, branched or cyclic alkoxy, acyloxy or alkylsulfonyloxy group of 1-15 carbon atoms, or a straight, branched or cyclic alkoxycarbonyloxy or alkoxyalkoxy group of 2-15 carbon atoms, in which some or all of the hydrogen atoms on constituent carbon atoms may be substituted with halogen atoms,

Z is a single bond or a straight, branched or cyclic (p+2)-valent hydrocarbon group of 1-5 carbon atoms, in which at least one methylene may be substituted with oxygen to form a chain-like or cyclic ether or two hydrogen atoms on a common carbon may be substituted with oxygen to form a ketone, and

p is 0, 1 or 2.

6. (Original) A resist composition comprising the polymer of claim 1.

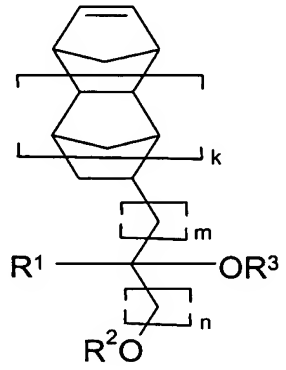
7. (Original) A process for forming a resist pattern comprising the steps of:

applying the resist composition of claim 6 onto a substrate to form a coating,

heat treating the coating and then exposing it to high-energy radiation or electron beams through a photo mask, and

optionally heat treating the exposed coating and developing it with a developer.

8. (New) The polymer of claim 1, wherein the units of formula (1-1) or (1-2) are derived from an ether compound of the following general formula (1):



(1)

wherein R^1 is hydrogen or a straight, branched or cyclic alkyl group of 1-6 carbon atoms, R^2 is a straight, branched or cyclic alkyl group of 1-6 carbon atoms, R^3 is hydrogen or an acyl or alkoxycarbonyl group of 1-15 carbon atoms in which some or all of the hydrogen atoms on the constituent carbon atoms may be substituted with halogen atoms, k is 0 or 1, m is an integer from 0-3, and n is an integer from 3-6.